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10/593,890	09/22/2006	Tesujiro Kondo	450100-05480	4739

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EXAMINER	
ZAMAN, FAISAL M	

ART UNIT	PAPER NUMBER
2111	

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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/593,890	KONDO ET AL.	
	Examiner	Art Unit	
	Faisal M. Zaman	2111	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *12 May 2009*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-18* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-18* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *22 September 2006* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☒ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date *9/22/06 and 5/6/08*.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Information Disclosure Statement

1. The information disclosure statement filed 9/22/2006 fails to comply with 37 CFR 1.98(a)(3) because it does not include a concise explanation of the relevance, as it is presently understood by the individual designated in 37 CFR 1.56(c) most knowledgeable about the content of the information, of each patent listed that is not in the English language. Specifically, the examiner is unable find a concise explanation of the relevance of Document Numbers 20045053, 2003196230, and 2001511558, and also non-patent literature entitled "Multi-Master Hoshiki no Shanai Network Protocol CAN no Kiso Chishiki". It has been placed in the application file, but the information referred to therein has not been considered, except for documents that have been initialed by the examiner.

Specification

2. The title of the invention is not descriptive. A new title is required that is clearly indicative of the invention to which the claims are directed.

The following title is suggested: --APPARATUS AND METHOD FOR CONTROLLING PLURAL FUNCTIONAL BLOCKS USING COMMON COMMAND--.

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

4. **Claims 1-8 and 11-14** are rejected under 35 U.S.C. 102(b) as being anticipated by McFadden et al. (U.S. Patent No. 6,614,804) ("McFadden").

Regarding Claim 1, McFadden discloses an information-signal-processing apparatus comprising:

plural functional blocks each for processing an information signal (Figure 1, items 16a-16c); and

a control block for controlling operations of the plural functional blocks (Figure 1, item 12/14),

wherein the control block or a predetermined block of the control block and the plural functional blocks issues a common command (Figure 5, item 200/202); and

each of the plural functional blocks adaptively operates in accordance with the issued common command (Column 5 line 59 - Column 6 line 14).

Regarding Claim 2, McFadden discloses wherein the functional blocks change a signal path or signal processing in accordance with the common command (Column 5 line 59 - Column 6 line 14).

Regarding Claim 3, McFadden discloses wherein the control block includes command acquisition means for acquiring the common command (Figure 1, item 14).

Regarding Claim 4, McFadden discloses wherein the command acquisition means acquires the common command from the plural functional blocks (Column 5, lines 31-36; i.e., if the server 12 is considered to be a part of the plural functional blocks).

Regarding Claim 5, McFadden discloses wherein the command acquisition means acquires the common command from an outside of the apparatus (Figure 1, item 14, Column 5, lines 31-36).

Regarding Claim 6, McFadden discloses wherein the control block has a first common command that corresponds to a user operation; and

wherein if the user operation that corresponds to the first common command is performed, the control block delivers this first common command to the plural functional blocks (Column 6, lines 46-57).

Regarding Claim 7, McFadden discloses wherein the control block has a second common command that does not correspond to a user operation; and

wherein the control block delivers the second common command to the plural functional blocks without associating this command with the user operation (Column 5 line 66 - Column 6 line 4).

Regarding Claim 8, McFadden discloses wherein the block that issues the common command delivers most recent values of the common commands (i.e., the most recent software upgrades) of all of kinds or some of the kinds to the plural functional blocks for every predetermined lapse of time (Column 9, lines 23-35).

Regarding Claim 11, McFadden discloses wherein the predetermined block issues the common command including a result of processing the information signal (Column 5, lines 31-36).

Regarding Claim 12, McFadden discloses wherein the control block and said plural functional blocks are connected to each other via a control bus (Column 4, lines 21-33).

Regarding Claim 13, McFadden discloses wherein each of the plural functional blocks is constituted of a substrate; and

wherein some or all of the plural functional blocks are respectively inserted into slots formed in a chassis thereof (Figure 1, items 16a-16c; i.e., the various circuit boards located within the clients).

Regarding Claim 14, McFadden discloses a functional block control method comprising the steps of:

transmitting a common command (Figure 5, item 200/202) to plural functional blocks (Figure 1, items 16a-16c), respectively, used to process an information signal from a control block (Figure 1, item 12/14) or from a predetermined block of the control block and the plural functional blocks; and

adaptively operating the plural functional blocks in accordance with the common command (Column 5 line 59 - Column 6 line 14).

5. **Claim 15** is rejected under 35 U.S.C. 102(e) as being anticipated by Nakatsugawa (U.S. Patent No. 6,754,719).

Regarding Claim 15, Nakatsugawa discloses a functional block comprising:

a control section (Figure 1, item 7 with 3b); and

a functional section that is controlled by this functional section (Figure 1, item 4b with 5b),

wherein the control section includes:

storage means for storing a correlation (i.e., a command conversion table) between a common command related to its own functional block and an intra-functional-block command used to control the control section (Nakatsugawa, Figure 1, item 7);

reception means (Figure 1, item 6) for receiving the common command from a control block (Figure 1, item 4a); and

conversion means for, if the common command received by the reception means is the common command related to its own functional block, converting this common command into an intra-functional-block command based on the correlation stored in the storage means (Nakatsugawa, Figure 1, item 6, Column 4 line 64 - Column 5 line 8).

Claim Rejections - 35 USC § 103

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

7. **Claim 9** is rejected under 35 U.S.C. 103(a) as being unpatentable over McFadden as applied to Claim 1 above, and further in view of Yoon et al. (U.S. Patent No. 6,345,185) ("Yoon").

Regarding Claim 9, McFadden discloses wherein the block that issues the common command transmits most recent values of the common commands of all of kinds or some of the kinds (McFadden, Column 9, lines 23-35).

McFadden does not expressly disclose transmitting the common command if a command indicative of a normal operation from the functional block that is to operate when having received the issued common command is not returned.

In the same field of endeavor (e.g., command transferring in a mobile communication system), Yoon teaches transmitting a most recent common command if a command indicative of a normal operation from a functional block that is to operate

when having received the issued common command is not returned (Yoon, Column 9, lines 31-39).

Accordingly, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have combined Yoon's teachings of command transferring in a mobile communication system with the teachings of McFadden, for the purpose of assuring that all of the functional blocks properly receive the common commands.

8. **Claim 10** are rejected under 35 U.S.C. 103(a) as being unpatentable over McFadden as applied to Claim 1 above, and further in view of Nakatsugawa.

Regarding Claim 10, McFadden does not expressly disclose wherein the functional blocks each comprises a control section and a functional section which is controlled by this functional section;

wherein the control section includes:

storage means for storing a correlation between the common command related to its own functional block and an intra-functional-block command used to control the control section;

reception means for receiving the common command from the control block; and

conversion means for, if the common command received by the reception means is the common command related to its own functional block, converting this common command into the intra-functional-block command based on the correlation stored in said storage means.

In the same field of endeavor (e.g., common command transferring between a plurality of devices), Nakatsugawa teaches wherein functional blocks each comprise a control section (Nakatsugawa, Figure 1, item 7 with 3b) and a functional section (Nakatsugawa, Figure 1, item 4b with 5b) which is controlled by this functional section;

wherein the control section includes:

storage means for storing a correlation between the common command related to its own functional block and an intra-functional-block command used to control the control section (Nakatsugawa, Figure 1, item 7);

reception means (Nakatsugawa, Figure 1, item 6) for receiving the common command from a control block (Nakatsugawa, Figure 1, item 4a); and

conversion means for, if the common command received by the reception means is the common command related to its own functional block, converting this common command into the intra-functional-block command based on the correlation stored in said storage means (Nakatsugawa, Figure 1, item 6, Column 4 line 64 - Column 5 line 8).

Accordingly, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have combined Nakatsugawa's teachings of common command transferring between a plurality of devices with the teachings of McFadden, for the purpose of allowing an intended device to properly execute a received command.

9. **Claims 16-18** are rejected under 35 U.S.C. 103(a) as being unpatentable over McFadden as applied to Claim 1 above, and further in view of Hao et al. (U.S. Patent No. 6,434,432) ("Hao").

Regarding Claim 16, McFadden discloses wherein the control block and the plural functional blocks respectively have a bus interface (Column 4, lines 21-33);

wherein the control block and the plural functional blocks respectively are connected to each other by a bus using the bus interface (Column 4, lines 21-33).

McFadden does not expressly disclose wherein the bus interface includes:

a message buffer for storing received data; and

a message storage control section for selectively storing data received via the bus in the message buffer.

In the same field of endeavor (e.g., message transferring between multiple functional blocks), Hao teaches wherein a bus interface includes:

a message buffer for storing received data; and

a message storage control section for selectively storing data received via the bus in the message buffer (Hao, Column 9, lines 36-42).

Accordingly, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have combined Hao's teachings of message transferring between multiple functional blocks with the teachings of McFadden, for the purpose of preventing wasting storage and processing time for functional blocks that are intended recipients of data or commands.

Regarding Claim 17, Hao teaches wherein the control block transmits the common command having at least an identifier to the plural functional blocks (Hao, Column 8, lines 64-67); and

wherein if the identifier of a predetermined common command that has been set beforehand agrees with an identifier of the common command that has been received via the bus, the message storage control sections in the plural functional blocks store this received common command into the message buffer (Hao, Column 9, lines 18-42).

The motivation that was used in the combination of Claim 16, super, applies equally as well to Claim 17.

Regarding Claim 18, Hao teaches wherein the bus is a CAN bus (Hao, Column 1, lines 18-23).

The motivation that was used in the combination of Claim 16, super, applies equally as well to Claim 18.

Prior Art of Record

10. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Simcoe et al. (U.S. Patent No. 5,418,967 A) discloses a fast arbiter having easy scaling for large numbers of requesters, large numbers of resource types with multiple instances of each type, and selectable queuing disciplines. Nunziata et al. (U.S. Patent No. 5,572,686 A) discloses a bus arbitration scheme with priority switching and timer. Popat (U.S. Patent No. 5,623,672 A) discloses an arrangement

and method of arbitration for a resource with shared user request signals and dynamic priority assignment. Lysik et al. (U.S. Patent No. 5,754,785 A) discloses communications network equipment. Gulick (U.S. Patent No. 5,778,200 A) discloses a bus arbiter including aging factor counters to dynamically vary arbitration priority. Van Hoff et al. (U.S. Patent No. 5,919,247 A) discloses a method for the distribution of code and data updates. Donohue (U.S. Patent No. 6,199,204 B1) discloses distribution of software updates via a computer network. Ohara (U.S. Patent No. 6,286,070 B1) discloses a shared memory access device and method. Nam et al. (U.S. Patent Application Publication No. 2004/0083471 A1) discloses a method of upgrading system software of a home appliance. Forest et al. (U.S. Patent Application Publication No. 2004/0081079 A1) discloses a method for monitoring a communication media access schedule of a communication controller of a communication system. Wolrich et al. (U.S. Patent Application Publication No. 2004/0186921 A1) discloses memory mapping in a multi-engine processor. Graff et al. (U.S. Patent Application Publication No. 2004/0196003 A1) discloses a control device, a control module, a module battery and a control system. Choi et al. (U.S. Patent No. 7,051,325 B2) discloses an apparatus and method for upgrading software.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Faisal M. Zaman whose telephone number is 571-272-6495. The examiner can normally be reached on Monday thru Friday, 8 am - 5:30 pm, alternate Fridays.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mark Rinehart can be reached on 571-272-3632. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Faisal M Zaman/
Patent Examiner, Art Unit 2111